Small Business Innovation Research/Small Business Tech Transfer

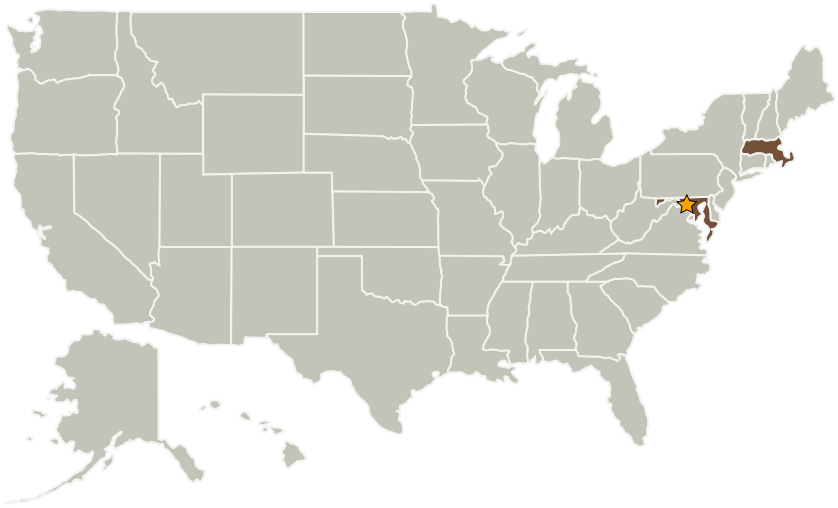
Digital Conically Scanned L-Band Radar, Phase I

Completed Technology Project (2008 - 2008)

Project Introduction

The proposed effort seeks to develop a digitally steered polarimetric phased array L-Band radar utilizing a novel, high performance architecture leveraging recent advances in radio frequency and digital signal processing components. The driving methodologies will be the minimization of costly and inflexible analog circuitry, adoption of standardized manufacturing processes, and inclusion of reconfigurable software/firmware architectures to facilitate fulfillment of varied sensing requirements.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Goddard Space Flight Center(GSFC)	Lead Organization	NASA Center	Greenbelt, Maryland
Dynamic Sensing Technologies	Supporting Organization	Industry	Amherst, Massachusetts

Primary U.S. Work Locations	
Maryland	Massachusetts

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Table of Contents

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Goddard Space Flight Center (GSFC)

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

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Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Luko Krnan

Technology Areas

Primary:

- TX05 Communications, Navigation, and Orbital Debris Tracking and Characterization Systems
  - TX05.2 Radio Frequency
    - TX05.2.6 Innovative Antennas